AUTHOR INDEX

Volume 1 (1961)

Agafonov, A. V., Gel'ms, I. E., and Rabinovich, E. I.
Choice of a catalyst for cracking residual petroleum fractions and an investigation of catalyst poisoning in the process, *Khim. i. Tekh. Topliv i Masel* 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 1 (1961).

Arest-Yakubovich, I. L. See Furman, M. S.

Artyukh, L. Yu., Vulis, L. A., and Kashkarov, V. P.
Combustion of gas flowing at the surface of a plate, *Inzh.-Fiz. Zhurn.* 4, No. 3 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 64 (1961).

Berlin, A. A., Boguslavski, L. I., Burshtein, R. Kh., Matveeva, N. G., Sherle, A. I., and Shurmovskaya, N. A.
Some electrophysical properties of polymer complexes of tetracyanethylene with metals, *Doklady AN SSSR* 136, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 122 (1961).

Boguslavski, L. I. See Berlin, A. A.

Burshtein, R. Kh. See Berlin, A. A.

Chudzikiewicz, R.
Factors affecting the degree of mixing of granular materials, *Przem. Chem.* 40, p. 48-51 (1961), Poland, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 124 (1961).

Dobó, J. See Somogyi, A.

Dolgoplosk, B. A. See Lyubetskii, S. G.

Efremova, G. D. and Koroleva, R. O.
The equilibrium solid-liquid-gas in the system melamine-ammonia-CO_2, *Zhurn. Fiz. Khim.* 35, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 22 (1961).

Efremova, G. D. and Leont'eva, G. G.
The solubility of melamine in solutions of dicyandiamide in liquid ammonia, *Khim. Prom.*, No. 8 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 24 (1961).

Erusalimskii, B. L. See Lyubetskii, S. G.

Furman, M. S., Shestakova, A. D., Arest-Yakubovich, I. L., and Lyubitsina, N. A.
Oxidation of n-butane in the liquid phase under pressure, *Khim. Prom.*, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 79 (1961).

Géczy, I. See Somogyi, A.

Gel'ms, I. E. See Agafonov, A. V.

Gel'perin, N. I. and Kvasha, V. P.
Maintaining optimum temperature conditions in chemical reactors, *Khim. Prom.*, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 68 (1961).

Gherghel, F. See Mihail, F.

Gromov, B. A. See Shlyapnikov, Yu. A.

Grove, C. S., Jr. and Jelinek, R. V.
Status of crystallization in the Soviet Union, (Review article), United States, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 6 (1961).

Jelinek, R. V. See Grove, C. S., Jr.

Kabanov, V. A. See Kargin, V. A.

Kafarov, V. V. See Zelinski, Yu. G.

Kagan, S. Z. See Kasatkin, A. G.

Kargin, V. A., Kabanov, V. A., Zubov, V. P., and Papisov, I. M.
Polymerization of acetone, *Doklady AN SSSR* 134, No. 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 17 (1961).

Kasatkin, A. G., Kagan, S. Z., and Trukhanov, V. G.
Empirical equilibrium distribution equations for liquid-liquid systems, *Khim. Prom.*, No. 6 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 50 (1961).

Kashkarov, V. P. See Artyukh, L. Yu.

Kornbaum, S. See Mihail, F.

Korneichuk, G. P., Roiter, V. A. Vol'fson, V. Ya., Zhigailo, Ya. V., and Lyubiteleva, A. Z.
Peculiarities of the catalytic oxidation of naphthalene: Investigation of the oxidation of naphthalene in deep beds of vanadia catalysts, *Ukrain. Khim. Zhurn.* 26, No. 4 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 26 (1961).

Koroleva, R. O. See Efremova, G. D.

Krestnikova, E. N. See Slavyanskii, V. T.

Kusnitsyna, T. A. See Uskov, I. A.

Kvasha, V. P. See Gel'perin, N. I.

Leont'eva, G. G. See Efremova, G. D.

Leonov, A. I.
Influence of the gaseous medium on the course of physicochemical processes in semiconductor oxides at high temperatures, *Izvest. AN SSSR, Otdel, Khim. Nauk*, No. 9 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 13 (1961).

AUTHOR INDEX

Volume 1 (1961)

Agafonov, A. V., Gel'ms, I. E., and Rabinovich, E. I.
Choice of a catalyst for cracking residual petroleum fractions and an investigation of catalyst poisoning in the process, *Khim. i. Tekh. Topliv i Masel* 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 1 (1961).

Arest-Yakubovich, I. L. See Furman, M. S.

Artyukh, L. Yu., Vulis, L. A., and Kashkarov, V. P.
Combustion of gas flowing at the surface of a plate, *Inzh.-Fiz. Zhurn.* 4, No. 3 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 64 (1961).

Berlin, A. A., Boguslavski, L. I., Burshtein, R. Kh., Matveeva, N. G., Sherle, A. I., and Shurmovskaya, N. A.
Some electrophysical properties of polymer complexes of tetracyanethylene with metals, *Doklady AN SSSR* 136, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 122 (1961).

Boguslavski, L. I. See Berlin, A. A.

Burshtein, R. Kh. See Berlin, A. A.

Chudzikiewicz, R.
Factors affecting the degree of mixing of granular materials, *Przem. Chem.* 40, p. 48-51 (1961), Poland, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 124 (1961).

Dobó, J. See Somogyi, A.

Dolgoplosk, B. A. See Lyubetskii, S. G.

Efremova, G. D. and Koroleva, R. O.
The equilibrium solid-liquid-gas in the system melamine-ammonia-CO_2, *Zhurn. Fiz. Khim.* 35, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 22 (1961).

Efremova, G. D. and Leont'eva, G. G.
The solubility of melamine in solutions of dicyandiamide in liquid ammonia, *Khim. Prom.*, No. 8 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 24 (1961).

Erusalimskii, B. L. See Lyubetskii, S. G.

Furman, M. S., Shestakova, A. D., Arest-Yakubovich, I. L., and Lyubitsina, N. A.
Oxidation of n-butane in the liquid phase under pressure, *Khim. Prom.*, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 79 (1961).

Géczy, I. See Somogyi, A.

Gel'ms, I. E. See Agafonov, A. V.

Gel'perin, N. I. and Kvasha, V. P.
Maintaining optimum temperature conditions in chemical reactors, *Khim. Prom.*, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 68 (1961).

Gherghel, F. See Mihail, F.

Gromov, B. A. See Shlyapnikov, Yu. A.

Grove, C. S., Jr. and Jelinek, R. V.
Status of crystallization in the Soviet Union, (Review article), United States, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 6 (1961).

Jelinek, R. V. See Grove, C. S., Jr.

Kabanov, V. A. See Kargin, V. A.

Kafarov, V. V. See Zelinski, Yu. G.

Kagan, S. Z. See Kasatkin, A. G.

Kargin, V. A., Kabanov, V. A., Zubov, V. P., and Papisov, I. M.
Polymerization of acetone, *Doklady AN SSSR* 134, No. 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 17 (1961).

Kasatkin, A. G., Kagan, S. Z., and Trukhanov, V. G.
Empirical equilibrium distribution equations for liquid-liquid systems, *Khim. Prom.*, No. 6 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 50 (1961).

Kashkarov, V. P. See Artyukh, L. Yu.

Kornbaum, S. See Mihail, F.

Korneichuk, G. P., Roiter, V. A. Vol'fson, V. Ya., Zhigailo, Ya. V., and Lyubiteleva, A. Z.
Peculiarities of the catalytic oxidation of naphthalene: Investigation of the oxidation of naphthalene in deep beds of vanadia catalysts, *Ukrain. Khim. Zhurn.* 26, No. 4 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 26 (1961).

Koroleva, R. O. See Efremova, G. D.

Krestnikova, E. N. See Slavyanskii, V. T.

Kusnitsyna, T. A. See Uskov, I. A.

Kvasha, V. P. See Gel'perin, N. I.

Leont'eva, G. G. See Efremova, G. D.

Leonov, A. I.
Influence of the gaseous medium on the course of physicochemical processes in semiconductor oxides at high temperatures, *Izvest. AN SSSR, Otdel, Khim. Nauk*, No. 9 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 13 (1961).

Lyubiteleva, A. Z. See Korneichuk, G. P.
Lyubitsina, N. A. See Furman, M. S.
Lyubetskii, S. G., Dolgoplosk, B. A., and Erusalimskii, B. L.
Polymerization of ethylene under the influence of free radicals. Kinetics of ethylene polymerization in benzene and heptane solution, *Vysokomol. Soedin.* 3, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 35 (1961).

Macho, Vendelin
Effect of sulfur and some of its compounds on the Oxo process, *Chem. Zvesti* 15 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 117 (1961).
Matveeva, N. G. See Berlin, A. A.
Mihail, F., Gherghel, F., Stănescu, M., and Kornbaum, S.
Chlorination of low-pressure polyethylene and its compounding with polyvinyl chloride, *Revista de Chimie* 12, No. 5 (1961), Romania, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 110 (1961).
Miller, V. B. See Shlyapnikov, Yu. A.
Mirzoeva, L. M.
Determination of solid phase concentration in a two-phase medium in upward motion in a vertical tube, Izv. *AN Azerbaidzhan. SSR*, No. 9 (1957), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 106 (1961).

Neiman, M. B. See Shlyapnikov, Yu. A.
Nemtsov, M. S.
Kinetic relationships in the reaction of olefins with sulfuric acid, *Khim. Prom.*, No. 8 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 39 (1961).

Ozimov, B. V. See Vol'nov, Yu. N.

Panchenkov, G. M., Skoblo, V. A., and Zhorov, Yu. M.
Determination of effective diffusion coefficients in porous sorbents, *Izv. Vysshikh Ucheb. Zaved., Neft i Gaz* 4, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 61 (1961).
Panchenkov, G. M. and Zhorov, Yu. M.
A method for the determination of the rates and kinetic constants of complex chemical reactions in a flowing system, *Doklady AN SSSR* 135, No. 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 58 (1961).
Panchenkov, G. M., Zhorov, Yu. M., and Yui-lin, Yu.
Kinetic aspects of the catalytic cracking of heavy distillate stocks, *Khim. i. Tekh. Topliv i Masel* 5, No. 11 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 55 (1961).
Papisov, I. M. See Kargin, V. A.
Potapova, K. K. See Yanovskaya, N. B.
Proskuryakov, M. V. See Slavyanskii, V. T.

Rabinovich, E. I. See Agafonov, A. V.
Roiter, V. A. See Korneichuk, G. P.

Sherle, A. I. See Berlin, A. A.
Shestakova, A. D. See Furman, M. S.
Shlyapnikov, Yu. A., Miller, V. B., Neiman, M. B., Torsueva, E. S., and Gromov, B. A.
Thermo-oxidative degradation of polypropylene: A study of the comparative effectiveness of some antioxidants, *Vysokomolekulyarnye Soed.* 2, No. 9 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 19 (1961).
Shurmovskaya, N. A. See Berlin, A. A.
Skoblo, V. A. See Panchenkov, G. M.
Slavyanskii, V. T., Krestnikova, E. N., and Proskuryakov, M. V.
Study of bubble formation in glass melting under vacuum, *Steklo i Keramika* 16, No. 9 (1959), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 99 (1961).
Somogyi, A., Géczy, I., and Dobó, J.
Graft copolymerization in the presence of benzoyl peroxide-dimethyl aniline with the aid of irradiation, *Magyar Tud. Akad. Kem. Oszt. Közl.* 15 (1961), Hungary, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 93 (1961).
Stănescu, M. See Mihail, F.

Tarasenko, Yu. G. See Uskov, I. A.
Torsueva, E. S. See Shlyapnikov, Yu. A.
Trukhanov, V. G. See Kasatkin, A. G.

Uskov, I. A., Tarasenko, Yu. G., and Kusnitsyna, T. A.
Compounding of dissolved polymethylmethacrylate with fillers, *Vysokomolek. Soed.* 3, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 132 (1961).

Varentsov, P. V. and Yufa, M. S.
The movement of a bed of solid particles in rotary kilns, *Khim. Mashinostroenie*, No. 5 (1959), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 88 (1961).
Vol'fson, V. Ya. See Korneichuk, G. P.
Vol'nov, Yu. N. and Ozimov, B. V.
Reflection spectra and their application to the study of sorption processes, *Zhurn. Vsesoyuz. Khim. Obshchestva im. D. I. Mendeleeva* 5, No. 5 (1960), Soviet Union, *Intl. Chem. Eng.* Vol. 1, No. 1, p. 129 (1961).
Vulis, L. A. See Artyukh, L. Yu.

Yanovskaya, N. B. and Potapova, K. K.
Investigations of polyacrylonitrile fibers obtained at various drafts, *Izv. Vysshikh Ucheb. Zaved., Tekhnol. Tekstil. Prom.*, No. 3 (1960), Soviet Union, *Intl. Chem. Eng.* Vol. 1, No. 1, p. 85 (1961).
Yufa, M. S. See Varentsov, P. V.
Yui-lin, Yu. See Panchenkov, G. M.

Zelinski, Yu. G. and Kafarov, V. V.
Hydrodynamic conditions on open-grid (turbo-grid) trays, *Khim. Prom.*, No. 2 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 1, No. 1, p. 74 (1961).

Zhigailo, Ya. V. See Korneichuk, G. P.
Zhorov, Yu. M. See Panchenkov, G. M.
Zubov, V. P. See Kargin, V. A.

Volume 2 (1962)

Adel'son, S. V. and Zaitova, A. Ya.
The oxidation of coke on the surface of a spherical aluminosilicate catalyst, *Khim. i Tekh. Topliv i Masel*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 360 (1962).

Agafonov, A. V. See Manshilin, V. V.

Agronomov, A. E. and Ling Li-Tang
The effect of the structure of a silica gel support on the activity of a copper catalyst, *Vestnik Mosk. Un-ta, Khimiya*, No. 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 236 (1962).

Ainshtein, V. G. See Gel'perin, N. I.

Aleksandrov, I. A. and Skoblo, A. E.
Basic characteristics and application ranges for various rectification and absorption column plates, *Khim. i Tekh. Topliv i Masel*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 353 (1962).

Andor, N.
New developments in the chemical processing of paper, *Magyar Kémikusok Lapja* 16, No. 10 (1961), Hungary, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 267 (1962).

Andreev, B. M. See Katalnikov, S. G.

Asaturyan, A. Sh. See Yablonskii, V. S.

Assmus, M. G. See Gel'perin, N. I.

Balandin, A. A. See Vasserberg, V. E.

Basevich, V. Ya. and Kogarko, S. M.
The effect of oxygen atoms on combustion at low pressures, *Doklady AN SSSR* 141, No. 3 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 450 (1962).

Bergo, B. G. See Platonov, V. M.

Beskov, V. S. See Slin'ko, M. B.

Bogatykh, S. A. and Reut, E. A.
A study of heat transfer processes in the liquid cooling of a gas in cyclone-foam equipment, *Khim. Mashinostroenie*, No. 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 315 (1962).

Boyarchuk, P. G. and Planovskii, A. N.
The kinetics of mass transfer in rectification apparatus of the film type, *Khim. Prom.*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 476 (1962).

Bronskii, L. N. See Zotikov, I. A.

Bryukvin, V. A. See Burovoi, I. A.

Buikov, M. V. and Dukhin, S. S.
Diffusional and thermal relaxation of evaporating drops, *Inzh.-Fiz. Zhurn.*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 399 (1962).

Burovoi, I. A., Eliashberg, V. M., D'yachko, A. G., and Bryukvin, V. A.
Mathematical models for thermochemical processes occurring in fluidized beds, *Khim. Prom.*, No. 11 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 251 (1962).

Bursian, N. R. See Maslyanskii, G. N.

Chekhov, O. S. and Khiterer, R. Z.
Some questions of ammonia synthesis in a column with a fluidized catalytic bed, *Khim. Prom.*, No. 4 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4 p. 585 (1962).

Cherkasova, V. F. See Lozovoi, A. V.

Chernikov, N. V. See Maslyanskii, G. N.

Chiotan, C., Dema, I., Frangopol, P. T., Gîrd, E., and Voicu, V.
Preparation of I-131 with high specific activity, *Revista de Chimie*, No. 12 (1961), Romania, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 357 (1962).

Ciborowski, J. and Surgiewicz, J.
Desublimation of hot phthalic anhydride vapors by direct cooling with inert cold gases, *Przemysl Chemiczny* 40, No. 11 (1961), Poland *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 290 (1962).

Ciborowski, J. and Wroński, S.
Desublimation studies using an indirectly cooled fluidized bed, *Chemia Stosowana* 4, No. 2 (1962), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 560 (1962).

Ciborowski, J. and Wroński, S.
Continuous condensation of sublimable materials in a fluidized bed, *Przemysl Chemiczny* 8 (1961), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 105 (1962).

Dema, I. See Chiotan, C.

Diyarov, I. N. See Leitman, Ya. I.

Dogin, M. E. and Lebedev, V. P.
Dependence of the resistance in pneumatic-conveying pipelines on the fundamental parameters of two-phase flow, *Inzh.-Fiz. Zhurn.* 8 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 64 (1962)

Donat, E. V.
A method of calculating the concentration of solid particles being transported by a gas stream along a horizontal pipeline, *Inzh.-Fiz. Zhurn.* 5, No. 6 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 550 (1962).

Drăgot, A. See Klang, M.

Dudorov, V. V., Neiman, M. B., and Lukovnikov, A. F.
Oxidation of polypropylene at high oxygen pressures; effect of temperature and pressure on induction period, *Plasticheskie Massy*, No. 12 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 242 (1962).

Dukhin, S. S. See Buikov, M. V.

Dykyj, J., Kl'účovský, P., Haspra, J., and Ondrus, I.
High temperature chlorination of propylene in a cyclonic reactor, *Chemický Průmysl* 11 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 57 (1962).

Dukyj, J. See Klůčovský, P.

Dŭsek, R. See Tichý, V.

D'yachko, A. G. See Burovoi, I. A.

Eidus, Ya. T.
The catalytic reactions of hydropolymerization of olefins and hydrocondensation of olefins with carbon monoxide, *Izv. AN SSSR, Otdel. Khim. Nauk*, No. 7 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 348 (1962).

Eliashberg, V. M. See Burovoi, I. A.

Eremin, E. N. See Ilin, D. T. and Tsentsiper, A. B.

Filippov, L. P.
Relative methods of measuring the thermal properties of fluids, *Inzh.-Fiz. Zhurn.* 4, No. 11 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 182 (1962).

Finat'ev, Yu. P. See Kosterin, S. I.

Frangopol, P. T. See Chiotan, C.

Fridshtein, I. L., Zimina, N. A., and Vanyashina, K. A.
Effect of reduction and oxidation on the activity of chromia-alumina catalysts, *Kinetika i Kataliz* 2 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 6 (1962).

Garanin, I. L. See Maslyanskii, G. N.

Gel'perin, N. I. and Ainshtein, V. G.
On the influence of the size and specific gravity of solid particles on their heat-transfer coefficient toward a gas in a fluidized bed, *Khim. i. Tekh. Topliv i Masel*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 501 (1962).

Gel'perin, N. I. and Assmus, M. G.
Mass transfer in injector extraction columns, *Khim. Prom.* 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1 p. 61 (1962).

Georgievskaya, T. V. See Vasserberg, V. E.

Gîrd, E. See Chiotan, C.

Gruia, M. See Nicolescu, I. V.

Gupalo, Yu. P.
The motion of solid bodies in a fluidized bed, *Inzh.-Fiz. Zhurn.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 376 (1962).

Haspra, J., See Kl'účovský, P. and Dykyj, J.

Hippe, Z. See Jedliński, Z.

Hobler, T.
Correlation of equations for liquid phase mass-transfer coefficients with wetted packing, *Przemysł Chemiczny* 7 (1961), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 132 (1962).

Hoffmann, A.
Heating of long cylinders at varying oven temperatures, *A. Magyar Tudományos Akadémia, Közleményei* 24, Nos. 1-4 (1961), Hungary, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 319 (1962).

Ilin, D. T. and Eremin, E. N.
Pyrolysis of gasoline vapor to acetylene and olefins in a hydrogen plasma, *Vestnik Mosk. Un-ta*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 524 (1962).

Ioffe, I. I. See Pis'men, L. M.

Ionass, A. A. See Vol'fkovich, S. I.

Ivanov, M. E.
The calculation of vapor condensation from a vapor-gas mixture, *Khim. Prom.*, No. 9 (1961), *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 282 (1962).

Janík, M.
Isolation of p-xylene from bituminous coal tar, *Chemický Průmysl* 11 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 12 (1962).

Jánů, M. and Kubiček, O.
Magnetic elastomers, *Technická Prace*, No. 3 (1962), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 526 (1962).

Jedliński, Z., Hippe, Z., and Mauberg, W.
A photometric method for the quantitative estimation of surface corrosion in metals, *Przemysł Chemiczny*, No. 2 (1962), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 504 (1962).

Jiru, P. and Kubica, L.
Stabilized vanadium oxidation catalysts for the production of sulfuric acid, *Chemický Průmysl*, No. 5 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 531 (1962).

Justa, S. and Kule, L.
Increased production in a technical oxygen plant, *Chemický Průmysl*, No. 1 (1962), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 365 (1962).

Kamenskii, I. V., Sanin, I. K., and Korshak, V. V.
Polymers based on silicon-containing furan compounds. The synthesis of ortho silicic acid-fur-

furyl alcohol esters, *Plasticheskie Massy*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 445 (1962).

Kamusher, G. D. See Maslyanskii, G. N.

Karshak, V. V. See Kamenskii, I. V.

Katalnikov, S. G., Revin, V. A., Andreev, B. M., and Prokopets, V. E.
Determining HETP in countercurrent ion exchange, *Zhurn. Priklad. Khim.*, No. 12 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 247 (1962).

Kazakov, R. G.
A new type of automatic settling centrifuge with axial filtration, *Khim. Mash.*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 536 (1962).

Khazanova, N. E. See Krichevskii, I. R.

Khiterer, R. Z. See Chekhov, O. S.

Khitrin, L. N., Ravich, M. B., and Kotova, L. L.
The methods and results of an investigation into the kinetic characteristics of the combustion of a powdered fuel in a stream, *Inzh.-Fiz. Zhurn.*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 384 (1962).

Khizgilov, I. Kh. See Yablonskii, V. S.

Klang, M. and Drăgot, A.
Initiation of peroxidation of kerosene by ionizing radiation, *Revista de Chimie* 12, No. 7 (1961), Romania, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 68 (1962).

Klúčovský, P., Haspra, J., and Dukyj, J., and see Dykyj, J.
A cyclone as a heat exchanger, *Chemický Průmysl*, No. 11 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 279 (1962).

Knyazev, V. S. See Manshilin, V. V.

Kobozev, N. I. See Tsentsiper, A. B.

Kogarko, S. M. See Basevich, V. Ya.

Kokorev, L. S. and Petrovichev, V. I.,
Measurement of heat-transfer coefficients under nonsteady-state conditions, *Zhurn. Priklad. Mekh. i Tekh, Fiz.* 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1 p. 54 (1962).

Kokorev, L. S. and Ryaposov, V. N.
Turbulent heat transfer during the flow of a heating medium of small Prandtl number along a tube, *Zhurn. Priklad. Mekh. i Tekh. Fiz.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 514 (1962).

Kolotyrkin, M. J. and Medvedeva, L. A.
Specific absorption of iodine ions on silver, *Doklady AN SSSR* 140, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 153 (1962).

Konobeev, V. I. and Zhavoronkov, N. M.
Hydraulic resistances in tubes with wavy roughness, *Khim. Mashinostroenie*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 431 (1962).

Koromal'di, E. V. See Zhdanov, S. P.

Koshmarov, Yu. A. and see Kosterin, S. I.
Hydrodynamics and heat transfer in a turbulent incompressible fluid stream in the gap between rotating coaxial cylinders, *Inzh.-Fiz. Zhurn.*, No. 5 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 455 (1962).

Kosterin, S. I., Koshmarov, Yu. A., and Finat'ev, Yu. P.
An experimental investigation of the hydrodynamic of a turbulent air stream in a gap between rotating coaxial cylinders, *Inzh.-Fiz. Zhurn.*, No. 5 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 460 (1962).

Kosterin, S. I., Koshmarov, Yu. A., and Osipov, Yu. V.
An investigation of flow and heat transfer in a rarified gas in a flat nozzle, *Inzh.-Fiz. Zhurn.*, No. 4 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 507 (1962).

Kotova, L. L. See Khitrin, L. N.

Kotulski, B. and Sachajdak, J.
Studies on the efficiency of spray-cleaning of effluents from chemical plants, *Przemysł Chemiczny* No. 2 (1962), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 543 (1962).

Kowalczyk, J. and Pompowski, T.
Studies on the possibility of using magnetohydrodynamic processes for mixing of electrolytes, *Chemia Stosowana*, No. 2 (1962), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 597 (1962).

Krichevskii, I. R., Khazanova, N. E., Lesnevskaya, L. S., and Polyakova, Z. A.
Diffusion in gases at high pressures, *Khim. Prom.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 438 (1962).

Kubica, L. See Jirů, P.

Kubiček, O. See Jánů, M.

Kule, L. See Justa, S.

Kutepov, A. M.
Centrifugal separation of secondary vapors in evaporation of solutions, *Khim. Prom.*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 408 (1962).

Kuznetsov, M. D. and Oratovskii, V. I.
Rate of chemisorption in a Venturi-type apparatus, *Izv. Vysshikh Uchebnykh Zavedenii, Khim. i Khim. Tekh.*, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.* Vol. 2, No. 2, p. 185 (1962).

László, A. and Németh, A.
The MAFKI process for partial oxidation of methane, *Magyar Kémikusok Lapja* 6 (1961), Hungary, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 1 (1962).

Lebedev, V. P. See Dogin, M. E.
Leitman, Ya. I. and Diyarov, I. N.
Sulfonation of hemimellitene (1, 2, 3-trimethylbenzene) and hydrolysis of its sulfonic acid: a kinetic study, *Zhurn. Priklad. Khim.* 34, No. 9 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 120 (1962).
Leonov, A. I.
The role of the activated transition state in chemical kinetics, *Zhurn. Fiz. Khim.*, No. 10 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 274 (1962).
Leont'ev, A. N., Oblivin, A. N., and Romanenko, P. N.
Investigation of resistance and heat exchange during turbulent air flow in axially symmetrical channels with a longitudinal pressure gradient, *Zhurn. Priklad. Mekh. i Tekh. Fiz.* 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 200 (1962).
Lesnevskaya, L. S. See Krichevskii, I. R.
Levich, V. G.
Movement of drops and bubbles in liquid media—excerpts from *Physicochemical Hydrodynamics* (1959), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 78 (1962).
Ling Li-Tang. See Agronomov, A. E.
Liu P'ei-Chang
On separation criteria in gas-phase chromatography, *Scientia Sinica* 10, No. 1 (1961), Communist China, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 493 (1962).
Lozovoi, A. V., Muselevich, D. L. Ravikovich, T. M., Senyavin, C. A., Titova, T. A., and Cherkasova, V. F.
Silica-alumina hydrogenation catalysts *Zhurn. Priklad. Khim.* 34, No. 10 (1961), *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 177 (1962).
Lukovnikov, A. F. See Dudorov, V. V.
Lykov, A. V. and Zhikharev, A. E.
A new method for separating molecular solutions and gas mixtures, *Inzh.-Fiz. Zhurn.*, No. 12 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 221 (1962).

Manakov, N. Kh. See Manshilin, V. V.
Manshilin, V. V., Manakov, N. Kh., Agafonov, A. V., Vasilenko, V. P., Maslov, I. Ya., and Knyazev, V. S.
Engineering development of a new fluidized catalytic cracking system, *Khim. i Tekh. Topliv i Masel*, No. 6 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 590 (1962).
Mar'yasin, I. L. and Tesner, P. A.
Kinetics of carbon surface growth in the thermal decomposition of methane within the 1,400—1,700° C temperature range, *Doklady AN SSSR* 140, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 303 (1962).
Maslov, I. Ya. See Manshilin, V. V.
Maslyanskii, G. N., Bursian, N. R., Kamusher, G. D., Potapova, A. A., Garanin, I. L., and Chernikov, N. V.
On certain technological problems in catalytic reforming, *Khim. i Tekh. Topliv i Masel* 8 (1961) Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 114 (1962).
Mauberg, W. See Jedliński, Z.
Medvedeva, L. A. See Kolotyrkin, M. J.
Mel'nikov, B. G. and see Vol'fkovich, S. I.
Concentration equation for multistage countercurrent interphase transfer, *Khim. i Tekh. Topliv i Masel* 6, No. 7 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2 p. 164 (1962).
Mirskii, Ya. V. and Mitrofanov, M. G.
Separation of hydrocarbon mixtures by means of molecular sieves, *Zhurn. Fiz. Khim.* 35, No. 2 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 207 (1962).
Mitrofanov, M. G. See Mirskii, Ya. V.
Monko, Ya. D. See Platonov, V. M.
Motulevich, V. P.
Heat and mass transfer at the front of a blunt body in the presence of heterogeneous chemical reactions, *Inzh.-Fiz. Zhurn.* 4, No. 11 (1961), Soviet Union, Vol. 2, No. 2, p. 193 (1962).
Motulevich, V. P.
A complete system of laminar boundary layer equations and boundary conditions in the presence of energy and mass sources in the fluid stream and on the solid surface, *Inzh.-Fiz. Zhurn.* 4, No. 10 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 149 (1962).
Moudrý, V. See Tichý, V.
Murashko, M. G.
A study of the filtering motion of liquids, taking into account the effects of heat and mass transfer phenomena, *Inzh.-Fiz. Zhurn.* 4, No. 10 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2 p. 161 (1962).
Muselevich, D. L. See Lozovoi, A. V.

Neiman, M. B. See Dudorov, V. V.
Němec, J.
Influence of pressure drop on the capacity of vacuum distillation columns, *Chemický Průmysl*, No. 4 (1962), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 511 (1962).
Németh, A. See László, A.
Nicolescu, I. V. and Gruia, M.
Establishment of criteria for selection of solid catalysts, *Revista de Chimie*, No. 1 (1962), Romania, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 464 (1962).

Nikitin, V. N. and Volchek, B. Z.
Study of polymers by means of infrared spectroscopy, *Zavodskaya Lab.*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 486 (1962).

Nikolaev, A. M. See Zhavoronkov, N. M. and Ponikarov, I. I.

Noninski, Kh. I.
Application of a new method for estimating the activation energy, *Khim. i Industriya*, No. 6 (1961), Bulgaria, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 404 (1962).

Novikov, P. A.
A study of sublimation from moving bodies under vacuum conditions, *Inzh.-Fiz. Zhurn.* 4, No. 10 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 174 (1962).

Novikov, S. S. and Ryazantsev, Yu. S.
Interaction between a weak entropy wave and the flame front, *Doklady AN SSSR* 139, No. 5 (1961), *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 198 (1962).

Oblivin, A. N. See Leont'ev, A. N.

Ondruš, I. See Dykyj, J.

Oratovskii, V. I. See Kuznetsov, M. D.

Osipov, Yu. V. See Kosterin, S. I.

Panchenkov, G. M.
The dynamics of unsteady-state physico-chemical processes in a flowing system subject to the bimolecular reaction rate law, *Doklady AN SSSR* 140, No. 2 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 297 (1962).

Pavlov, B. V. See Shantarovich, P. S.

Pavlushenko, I. S. See Smirnov, N. N.

Petrovichev, V. I. See Kokorev, L. S.

Piguzova, L. I.
Thermal stability of the structure of sorbents of the molecular sieve type, *Khim. i Tekh. Topliv i Masel* 6, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 189 (1962).

Piottukh, Iu. N. and Shabanov, S. I.
Heat exchange in three-component flow, *Izv. Sibirskogo Otdel. AN SSSR*, No. 11 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 520 (1962).

Pis'men, L. M. and Ioffe, I. I.
Calculation of optimal processes in chemical reactors by the method of dynamic programming, *Khim. Prom.*, No. 4 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 567 (1962).

Planovskaya, I. P. See Topchieva, K. V.

Planovskii, A. N. See Boyarchuk, P. G.

Platonov, V. M., Monko, Ya. D., and Bergo, B. G.
The Ural digital computer as an aid in calculating unsteady-state rectification, *Khim. Prom.* 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 109 (1962).

Polyakova, Z. A. See Krichevskii, I. R.

Pomerantsev, V. V. and Rundygin, Yu. A.
An investigation into the mechanism of low-temperature oxidation of electrode carbon, *Inzh.-Fiz. Zhurn.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 372 (1962).

Pompowski, T. See Kowalczyk, J.

Ponikarov, I. I., Nikolaev, A. M., and Zhavoronkov, N. M.
A comparative evaluation of several types of extraction equipment, *Khim. Mash.*, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 546 (1962).

Pop, G.
The catalytic properties of equimolar mixtures of oxides of the type $V_2O_XMO_Y$, *Revista de Chimie*, No. 1 (1962), Romania, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 472 (1962).

Potapova, A. A. See Maslyanskii, G. N.

Predvoditelev, A. S.
On the thermal motion in liquids. Part 1, 2, 3, *Inzh-Fiz. Zhurn.* 4, No. 6, 7, 8 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 25 (1962).

Prokopets, V. E. See Katalnikov, S. G.

Pzhezhetski, S. Ya. See Sorokin, Yu. A.

Rado, R.
Controlled decomposition of polypropylene, *Chemický Průmysl*, No. 4 (1962), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 482 (1962).

Ratner, S. B., Stinskas, A. V., and Shpakovskaya, E. I.
Long-time strength of plastics, *Plasticheskie Massy* 7 (1961). Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 18 (1962).

Ravich, M. B. See Khitrin, L. N.

Ravikovich, T. M. See Lozovoi, A. V.

Razumov, I. M.
Calculating pneumatic transport of solid catalysts *Khim. i Tekh. Topliv i Masel*, No. 4 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 539 (1962).

Remen, R. E. See Vol'fkovich, S. I.

Reut, E. A. See Bogatykh, S. A.

Revin, V. A. See Katalnikov, S. G.

Romanenko, P. N. See Leont'ev, A. N.

Romankov, P. G. See Smirnov, N. N.

Rozental, A. L.
Chemical reactions of gases with solids in a fluidized bed, *Kinetika i Kataliz*, No. 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 425 (1962).

Rumynskii, A. N.
The effect of diffusion of a radiating additive on convective heat transfer, *Zhurn. Priklad. Mekh. i Tekh. Fiz.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 554 (1962).

Rundygin, Yu. A. See Pomerantsev, V. V.
Ryaposov, V. N. See Kokorev, L. S.
Ryazantsev, Yu. S. See Novikov, S. S.

Sachajdak, J. See Kotulski, B.
Safarov, I. A.
Mechanism of displacement of oil by water in two-layer pools, *Zhurn. Priklad. Mekh. i Tekh. Fiz.*, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 208 (1962).
Safin, R. Sh. See Zhavoronkov, N. M.
Sanin, I. K. See Kamenskii, I. V.
Sarychev, V. M.
Motion of plasma through a pipe placed in exterior crossed electric and magnetic fields, *Zhurn. Priklad. Mekh. i Tekh. Fiz.* 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 90 (1962).
Sazhin, B. S.
The basic factors governing the drying of paste-like materials under the conditions prevailing in rotary ribbon dryers, *Inzh.-Fiz. Zhurn.* 5, No. 6 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 575 (1962).
Selix, M.
Pressure drops on turbogrid trays, *Chemický* Průmysl, No. 2 (1962), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 394 (1962).
Semenchenko, V. K.
The thermodynamics of critical and trans-critical phenomena in solutions, *Zhurn. Fiz. Khim.* 35, No. 11 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, p. 261 (1962).
Senyavin, C. A. See Lozovoi, A. V.
Shabanov, S. I. See Piottukh, Iu. N.
Shal'nev, K. K.
Erosion cavitation of plastics, *Doklady AN SSSR* 139, No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 123 (1962).
Shantarovich, P. S. and Pavlov, B. V.
Thermal cracking of methane, *Zhurn. Fiz. Khim.* 34, No. 5 (1960), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 415 (1962).
Shmonina, V. P. and Sokol'skii, D. V.
Catalytic reduction mechanisms for nitrobenzene and some of its derivatives, *Kinetika i Kataliz*, No. 7 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 135 (1962).
Shpakovskaya, E. I. See Ratner, S. B.
Shumskii, K. P.
A new principle in design of equipment for volumetric condensation of liquid vapors under vacuum, *Khim. Mash.* 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 73 (1962).
Shurygin, A. P. See Vol'fkovich, S. I.
Sidel'kovskii, L. N. See Vol'fkovich, S. I.
Siedlewski, J. See Swinarski, A.
Skoblo, A. E. See Aleksandrov, I. A.
Slin'ko, M. B. and Beskov, V. S.
Calculation of contact equipment with adiabatic catalyst layers for oxidation of sulfur dioxide, *Khim. Prom.*, No. 12 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 388 (1962).
Smirnov, N. N., Pavlushenko, I. S., and Romankov, P. G.
The dependence of the reaction rate on the nature of the interacting substances and degree of transformation during mechanical mixing, *Zhurn. Priklad. Khim.*, No. 1 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 421 (1962).
Sokol'skii, D. V. See Shmonina, V. P.
Solchani, P.
A new method of describing the expansion of a fluidized bed, *Khim. Prom.*, No. 4, Hungary, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 258 (1962).
Sorokin, Yu. A. and Pzhezhetski, S. Ya.
Formation of hydrazine from liquid or solid ammonia by gamma-radiation, *Doklady AN SSSR* 138, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 129 (1962).
Starý, M. See Vlček, V.
Stinskas, A. V. See Ratner, S. B.
Surgiewicz, J. See Ciborowski, J.
Swinarski, A. and Siedlewski, J.
Fractionation of activated carbon via fluidization, *Przemysł Chemiczny* 40, No. 11 (1961), Poland, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 342 (1962).

Taganov, N. I.
Design calculations for chemical equipment, *Zhurn. Priklad. Khim.* 7 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 50 (1962).
Tang, Au-Chin and Yao, Kuo-Sui
The reaction kinetics of polyesterification, *Kao Fen Tzu T'ung Hsün* (High Polymer Communications) 3, No. 5 (1959), Communist China, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 39 (1962).
Tesner, P. A. See Mar'yasin, I. L.
Tichý, V., Dŭsek, R., and Moudrý, V.
Preparation of methylphenyldiethoxysilane by a single-step Grignard synthesis, *Chemický Průmysl*, No. 10 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 306 (1962).
Titova, T. A. See Lozovoi, A. V.
Topchieva, K. V. and Planovskaya, I. P.
The effect of stream velocity and catalyst bed height on the degree of gas-phase mixing in a fluidized bed, *Doklady AN SSSR*, Vol. 141, No. 3 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 419 (1962).
Troyankin, Yu. V. See Vol'fkovich, S. I.
Tsentsiper, A. B., Eremin, E. N., and Kobozev, N. I.
A comparative study of reaction kinetics in batch conversion of various hydrocarbons to acetylene using an electric arc torch, *Doklady AN SSSR* 141,

No. 1 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 412 (1962).

Tudose, R.
A column for liquid-liquid extraction, *Revista de Chimie* 12, No. 9 (1961), Romania, *Intl. Chem. Eng.*, Vol. 2 No. 2, p. 156 (1962).

Vanyashina, K. A. See Fridshtein, I. L.

Vasilenko, V. P. See Manshilin, V. V.

Vasserberg, V. E., Balandin, A. A., and Georgievskaya, T. V.
Inhibition of catalyst surface reactions and mobility of the absorbed molecules, *Doklady AN SSSR* 140, No. 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 345 (1962).

Vasserberg, V. E., Balandin, A. A., and Georgievskaya, T. V.
Interaction of reacting molecules at the surface of dehydration catalysts, *Doklady AN SSSR* 140, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 333 (1962).

Vávra, V. See Vlček, V.

Vlček, V., Vávra, V., and Starý, M.
Optimization of conditions for foam-phase absorption of sulfur trioxide, *Chemický Průmysl*, No. 9 (1961), Czechoslovakia, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 216 (1962).

Voicu, V. See Chiotan, C.

Volchek, B. Z. See Nikitin, V. N.

Vol'fkovich, S. I., Ionass, A. A., Mel'nikov, E. B., Remen, R. E., Sidel'kovskii, L. N., Troyankin, Yu. V., Shurygin, A. P., and Yagodina, T. N.
Hydrothermal processing of phosphates in a cyclone furnace, *Khim. Prom.* 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 98 (1962).

Wroński, S. See Ciborowski, J.

Yablonskii, V. S., Asaturyan, A. Sh., and Khizgilov, I. Kh.
Turbulent diffusion in pipes, *Inzh.-Fiz. Zhurn.*, No. 3 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 3 (1962).

Yagodina, T. N. See Vol'fkovich, S. I.

Yao, Kuo-Sui. See Tang, Au-Chin.

Zaitova, A. Ya. See Adel'son, S. V.

Zalmanzon, L. A.
High-response measurement of the temperature of gases and liquids by means of the simplest pneumatic and hydraulic sensing devices, *Avtomatika i Telemekhanika* 9 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 169 (1962).

Zaryarnyi, N. S.
Computer model for ammonia synthesis columns, *Khim. Prom.*, No. 12 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 378 (1962).

Zel'dovich, Ya. B.
Chain reactions in hot flames—an approximate theory for flame velocity, *Kinetika i Kataliz* 2, No. 3 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 2, p. 227 (1962).

Zhavoronkov, N. M., Safin, R. Sh., and Nikolaev, A. M., and see Konobeev, V. I. and Ponikarov, I. I.
Mass transfer in rotary-type apparatus, *Khim. Mash.* 5 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 94 (1962).

Zhdanov, S. P. and Koromal'di, E. V.
Selective sorption on porous glasses, *Doklady AN SSSR* 138, No. 4 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 1, p. 126 (1962).

Zhevnovatyi, A. N.
The influence of the basic parameters of hydrocyclone-thickeners on their operating efficiency, *Khim. Mash.*, No. 2 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 580 (1962).

Zhikharev, A. E. See Lykov, A. V.

Zhivaikin, L. Ya.
Liquid film thickness in film-type units, *Khim. Mashinostroenie*, No. 6 (1961), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 3, p. 337 (1962).

Zimina, N. A. See Fridshtein, I. L.

Zotikov, I. A. and Bronskii, L. N.
An experimental study of heat transfer during the melting of a metal and in the case when a molten metal is injected through a porous wall in a supersonic stream, *Inzh.-Fiz. Zhurn.*, No. 4 (1962), Soviet Union, *Intl. Chem. Eng.*, Vol. 2, No. 4, p. 528 (1962).

CONTENTS

Vol. 1, No. 1-October 1961

A. V. Agafonov, I. E. Gel'ms, and E. I. Rabinovich: Choice of a catalyst for cracking residual petroleum fractions and an investigation of catalyst poisoning in the process, Khim. i Tekh. Topliv i Masel 5 (1960), U.S.S.R. **1**

C. S. Grove, Jr. and R. V. Jelinek, Syracuse University: Status of crystallization in the Soviet Union, (Review article), UNITED STATES. **6**

A. I. Leonov: Influence of the gaseous medium on the course of physicochemical processes in semiconductor oxides at high temperatures, Izvest. Akad. Nauk SSSR, Otdel. Khim. Nauk No. 9, 1529-1534 (1960), U.S.S.R. **13**

V. A. Kargin, V. A. Kabanov, V. P. Zubov, and I. M. Papisov: Polymerization of acetone, Doklady Akad. Nauk SSSR 134, No. 5, 1098-1099 (1960), U.S.S.R. **17**

Yu. A. Shlyapnikov, V. B. Miller, M. B. Neiman, E. S. Torsueva and B. A. Gromov: Thermo-oxidative degradation of polypropylene: A study of the comparative effectiveness of some antioxidants, Vysokomolekulyarnye Soedineniya 2, No. 9, 1409-1412 (1960), U.S.S.R. **19**

G. D. Efremova and R. O. Koroleva: The equilibrium solid-liquid-gas in the system melamine-ammonia-CO_2, Zhurnal Fizicheskoi Khimii, Vol. 35, No. 4, (1961), U.S.S.R. **22**

G. D. Efremova and G. G. Leont'eva: The solubility of melamine in solutions of dicyandiamide in liquid ammonia, Khimicheskaya Promyshlennost, No. 8, (1960), U.S.S.R. **24**

G. P. Korneichuk, V. A. Roiter, V. Ya. Vol'fson, Ya. V. Zhigailo, and A. Z. Lyubiteleva: Peculiarities of the catalytic oxidation of naphthalene: Investigation of the oxidation of naphthalene in deep beds of vanadia catalysts, Ukrain. Khim. Zhur. 26, No. 4, 432-439 (1960), UKRAINE, U.S.S.R. **26**

V. Ya. Vol'fson, G. P. Korneichuk, V. A. Roiter, and Ya. V. Zhigailo: Peculiarities of the catalytic oxidation of naphthalene: Kinetics of the oxidation of naphthalene in deep beds of vanadia catalysts, Ukrain. Khim. Zhur. 26, No. 5, 588-593 (1960), UKRAINE, U.S.S.R. **31**

S. G. Lyubetskii, B. A. Dolgoplosk, and B. L. Erusalimskii: Polymerization of ethylene under the influence of free radicals. Kinetics of ethylene polymerization in benzene and heptane solution, Vysokomolekulyarnye Soedineniya 3, No. 5, 734-739 (1961), U.S.S.R. **35**

M. S. Nemtsov: Kinetic relationships in the reaction of olefins with sulfuric acid, Khim. Prom. No. 8, 15-23 (1960), U.S.S.R. **39**

A. G. Kasatkin, S. Z. Kagan, and V. G. Trukhanov: Empirical equilibrium distribution equations for liquid-liquid systems, Khim. Prom. No. 6, 50-54 (1960), U.S.S.R. **50**

G. M. Panchenkov, Yu. M. Zhorov, and Yu. Yui-lin: Kinetic aspects of the catalytic cracking of heavy distillate stocks, Khim. i Tekhnol. Topliv i Masel 5, No. 11, 4-8 (1960), U.S.S.R. **55**

G.M. Panchenkov and Yu. M. Zhorov: A method for the determination of the rates and kinetic constants of complex chemical reactions in a flowing system, Doklady Akad. Nauk SSSR 135, No. 5, 1172-1175 (1960), U.S.S.R. **58**

G. M. Panchenkov, V. A. Skoblo, and Yu. M. Zhorov: Determination of effective diffusion coefficients in porous sorbents, Izvest. Vysshikh Ucheb. Zaved., Neft i Gaz 4, No. 1, 73-77 (1961), U.S.S.R. **61**

L. Yu. Artyukh, L. A. Vulis, and V. P. Kashkarov: Combustion of gas flowing at the surface of a plate, Inzhener.-Fiz. Zhur., 4, No. 3 (1961), KAZAKHSTAN, U.S.S.R. **64**

N. I. Gel'pern and V. P. Kvasha: Maintaining optimum temperature conditions in chemical reactors, Khimicheskaya Promyshlennost, No. 1, 51-56 (1961), U.S.S.R. (1961), U.S.S.R. **68**

Yu. G. Zelinski and V. V. Kafarov: Hydrodynamic conditions on open-grid (turbogrid) trays, Khimicheskaya Promyshlennost, No. 2, 122-126 (1961), U.S.S.R. 122-126 (1961), U.S.S.R. **74**

M. S. Furman, A. D. Shestakova, I. L. Arest-Yakubovich, and N. A. Lyubitsina: Oxidation of n-butane in the liquid phase under pressure, Khimicheskaya Promyshlennost, No. 1, 6-11 (1961), U.S.S.R. **79**

N. B. Yanovskaya and K. K. Potapova: Investigations of polyacrylonitrile fibers obtained at various drafts, Izvest. Vysshikh Ucheb. Zaved., Tekhnol. Tekstil. Prom., No. 3 (16) 24-29 (1960), U.S.S.R. **85**

P. V. Varentsov and M. S. Yufa: The movement of a bed of solid particles in rotary kilns, Khim. Mashinostroenie, No. 5, 22-26 (1959), U.S.S.R. **88**